Work Orde <i>May-06-14 8:08:</i>		8977			*118	3977*						Page 1
Revision ID:	D3492-3			Ac	cept	*N900	040	100)* s	etup Sta	171	S1* S2*
	5/05/14	Start Qty: 100. Req'd Qty: 100.		100* 100*		Cust Item l Customer:	D:				T I U	
Approvals:	Process Pla	an: MUS	Date: \	05-07 1	Cooling:	D	ate:	-	R	un Sta	~1 <i>\</i> 1	R1*
	QC:		Date:		SPC (Y/N):	D	ate:			· Sto	*N	R2*
Sequence ID/ Work Center ID		Operation Description			Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Rev	vision Nbr										
D3492	Е		1									
100		Hardinge CNC LATH	IE SMALL		0.00				10le	Ø		DAS 20 9-80 14-05-19
Hardinge CNC Lathe	Small	Memo 1-Turn as Dwg Rev Folio Rev	s per Folio FA632 o : v: 4B	& Dwg D3492	0.00							-
110		QC2- Inspect parts of	f machine FAI/FAI	В	0.00							DAS 20
110 QC Quality Control		Мето			0.00				106	<u>Ø</u>		20 9-89 4-05-19
120		QC8- Inspect parts - s	second check		0.00				106	b		8 co
120 QC Quality Control		Мето	·		0.00				100	<u> </u>	***************************************	DAS 13 9-89

DQA:			Date:			•			_				TRAC		
						WORK ORDER NON-	-CC	ONFO	RMANCE / UF				AEROSPACE		
QA Closed:			Date:							· · · · · · · · · · · · · · · · · · ·	Vork Order ι	ipdate only			
Work Orde	or.					DISPOSITION									
WOIK OIG	-					Rework	1		Skid-tube	Crosstube	7	Water Jet	Engineering		
Part N	Jo.					Scrap			Machining	Small Fab	⊢ Pr	Quality			
T GIVE	-				_	Use-as-is			noforming	Finishing		od. Eng. Coor. ore/Packaging	Other		
NCR N	lo.					Suspected Unapproved		111011	Large Fab	Composite	,	Supplier			
	_						J		·	٠ ـــ					
Root		4			Descr	iption of work order update	_ i	nitial	Acti	ion	Sign &				
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	iption	Date	Verification	QC Inspector		
Design									•••						
Doc/Data			'			÷									
Equip/Tooling	_														
Handling/Pre															
Material					}		ĺ								
Operator															
Offset/Setup	_														
Process	\Box														
Supplier															
Training	Ш														
Transport															
Unapproved			l			·	<u> </u>		<u>L</u>			1			
2,3							FAI	ULT CA	regory		·	<u> </u>			
Lándi						General	_	1 /-		Г	٦	Г	¬¬¬¬¬¬¬		
	-	Bending			_	Bend	⊢	•	rogram	· }-	Outside Dir	}	Pressure/Forced		
	_	Centre No	ot Concer	ntric	<u> </u>	BOM/Route	\vdash	Grain		-	Part Incorr	r tolerance	Set-up Temperature/Cure		
	-	Cracks	. . /5: -	/\A1==	<u> </u>	Broken/Damage/Defect	⊢	Hardwa		- L		-	Weld		
	$\overline{}$	Crimp/Kir	ік/кірріе	/wave		Burrs	\vdash	1 '	ion Incomplete/Un	<u> </u>	Part Lost/N	_	→		
	-	Cuffs			-	Contamination Countersink	\vdash	4	ions Incomplete/U gned/off center	Inclear -	Part Moved Wrong Stock Pu				
:	-	Crushing Heat Trea	· +		-	Cut Too Short	\vdash	•		-			Other		
	\vdash	neat Trea Inspection		Tube	<u> </u>	Drawing	-	Mislabeled Power Loss/Surge Other Misread			10000				
	-	Marks/Ch	•	iune	-	Drill Holes	Off-set								
	-	Turning S			\vdash	Finish	\vdash	4	Calibration						
	-	Wave/Tw				Fit/Function		4	Sequence	•					
	. 1	-,				1 *	1	1							

Work Ord <i>May-06-14 8:0</i>		118977		*118	3977*		r				Page 2
Item ID: Revision ID: Item Name:	D3492-3			Accept	*N900	<u> </u>	იი	* S	etup Start Stop	: I VI	S1* S2*
Start Date: Required Date Reference:	5/05/14	Start Qty: 100.00 Req'd Qty: 100.00	*100 *100		Cust Item I Customer:	D:				·· N	
Approvals:	Process QC:		Date:	Tooling: SPC (Y/N):		ate:	· · · · · · · · · · · · · · · · · · ·	R	un Start Stop	"IVI	R1* R2*
Sequence ID/ Work Center 130 *120* HandFinish Hand Finishing	ID	Operation Description Chemical Conversion Coat Memo	per QSI005 4.1	Set Up/ Run Hours 0.00	Tool ID		Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 *1 10* Powdercoat Powder Coating		White Gloss(Ref.4.3.5.1) The Memo (Flat End Only) START TIME: OVEN TEMPE	109 3:15	0.00 0.00	•			<u>106</u>	6 p	<u>4-6</u>	4. 8 8 8

150

150

Quality Control

QC3- Inspect Part Finish

Memo

OAS 27 9-89 0.00

DQA:			Date:											"DART
						WORK ORDER NON	-CC	ONFO	RMANCE / UPDATE					AEROSPACE
QA Closed:			Date:							W	ork Order up	odate only		
Work Orde	ar.					DISPOSITION		AGAINST DEPARTMENT/PROCESS						•
WOIK OIGE	٠.		*			Rework	1	Skid-tube Crosstube Water				Water Jet		Engineering
Part N	lo.					Scrap	1					d. Eng. Coor.	\neg	Quality
	•					Use-as-is	1 1	ľ	noforming Finishing	,	Rec/Sto	re/Packaging		Other
NCR N	۱o.					Suspected Unapproved	1		Large Fab Composite			Supplier		
Root					Desc	ription of work order update	1	Initial	Action		Sign &		-	
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification		QC Inspector
Design														
Doc/Data			1											
Equip/Tooling	_		!											
Handling/Pre				1										
Material			l l											
Operator														
Offset/Setup		i											Ì	
Process											ļ		ı	
Supplier														
Training _													l	
Transport														
Unapproved			<u> </u>	l			FΔ	UIT CA	TEGORY		<u> </u>	l		···
Landi	nø (General		<u> </u>						
Landi		Bending				Bend	Г] Folio/F	Program	Г	Outside Dim	ensions		Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance		Set-up
		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorre	ci		Temperature/Cure
	H	Crimp/Kii	nk/Ripple	/Wave	<u> </u>	Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/M	issing		Weld
		Cuffs		•		Contamination		Instruc	tions Incomplete/Unclear		Part Moved			Wrong Stock Pulled
		Crushing				Countersink		Misali	gned/off center		Positioned V	Vrong _		
		Heat Trea				Cut Too Short		Mislab	eled		Power Loss/	Surge [Other
		Inspectio	n Strip in	Tube		Drawing		Misrea	d					
		Marks/Cl	natter			Drill Holes		Off-set						
		Turning S	Sequence			Finish		Out of	Calibration					
		Wave/Tw	vist in Tub	oe		Fit/Function	Out of Sequence							

Work Orde May-06-14 8:08		118977		*118	1977*						Page 3
Revision ID:	D3492-3			Accept	*N900	<u>040</u>	100)*	Setup Sta	17	IS1* IS2*
Start Date: Required Date: Reference:	5/05/14 5/05/14	Start Qty: 100.00 Req'd Qty: 100.00	*100° *100°		Cust Item 1 Customer:	D:					
Approvals:	Process QC:	Plan:	Date:	Tooling: _ SPC (Y/N):		ate:	<u>-</u>]	Run Sta Sto	^ \	IR1* IR2*
Sequence ID/ Work Center II 160 *160* Packaging Packaging)	Operation Description Identify as per dwg & Stoo	k Location: \(\overline{f}^2 - 0 \overline{6} \)	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

170

QC21- Final Inspection - Work Order Release

0.00

170

Quality Control

Memo

0.00

14/6/54) MF 65

DQA:			Date:											DART	
0.1.01			Data			WORK ORDER NON-	-CC	ONFO	RMANCE / U		14/6	ork Order up	odate only	AEROSPACE	
QA Closed:			Date:		-		_				VVC	ork Order up	date only		
Work Ord	er.					DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Work Ora						Rework	Skid-tube Crosstube Water Jet Engineering							Engineering	
Part N	No.					Scrap		1	Machining	Small Fab	-	Pro	d. Eng. Coor.	Quality	
	-					Use-as-is		Thern	noforming	Finishing		Rec/Stor	re/Packaging	Other	
NCR I	No.					Suspected Unapproved			Large Fab	Composite			Supplier		
												a: 0			
Root					Desci	ription of work order update		nitial	Act			Sign &	V = -161 = -11 =	00 1	
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption		Date	Verification	QC Inspector	
Design												·			
Doc/Data	Н														
Equip/Tooling	Н														
Handling/Pre	Ш														
Material	Ш														
Operator	Н														
Offset/Setup	\vdash														
Process															
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Transport	\vdash						ļ								
Unapproved			<u>.</u>	<u> </u>		***************************************	FAI	ULT CA	TEGORY			<u> </u>		<u> </u>	
Landi	ng (iear				General									
		Bending				Bend		Folio/F	Program			Outside Dim	ensions	Pressure/Forced	
		Centre No	ot Concer	ntric	ļ	BOM/Route		Grain				Over/Under	tolerance	Set-up	
	Г	Cracks				Broken/Damage/Defect		Hardwa	are			Part Incorre	cí [Temperature/Cure	
		Crimp/Ki	nk/Ripple	/Wave		Burrs		inspect	ion Incomplete/Ur	nqualified		Part Lost/Mi	issing	Weld	
		Cuffs	- • •			Contamination						Wrong Stock Pulled			
		Crushing				Countersink	Misaligned/off center Positioned Wrong								
		Heat Trea				Cut Too Short	Mislabeled Power Loss/Surge Other				Other				
		Inspectio	n Strip in	Tube		Drawing	Misread								
:		Marks/Ch	natter			Drill Holes		Off-set							
		Turning S	equence			Finish		Out of	Calibration						
		Wave/Tw	ist in Tub	oe		Fit/Function		Out of	Sequence	_					

Picklist Print

May-06-14 8:08:37 AM

Work Order ID: 118977

118977

Parent Item:

D3492-3

D3492-3

Parent Item Name:

Plug

Start Date: 5/05/14

Required Date: 5/05/14

Page 1

Start Qty: 100.00

Required Qty: 100.00

Comments:

IPP Rev:A 11.04.19 per dwg revC DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.750		Purchased	No			100	f	43.9111	0.06	7			DAS
*M6061T6	SR0 750	*							** -	875			20 14-05-1

DQA:	Date:		. WORK ORDER NON	CO	NICOI	DAAANCE / LIDDATE				DART
QA Closed:	Date:		WORK ORDER NON-	-00	NFUI		Work	Order u	odate only	AEROSPACE
Marile Ondone			DISPOSITION			AGAINST	DEPA	RTMENT	/PROCESS	-
Work Order:			Rework			Skid-tube Crosstube			Water Jet	Engineering
Part No.			Scrap			Machining Small Fab			d. Eng. Coor.	Quality
NCR No.			Use-as-is Suspected Unapproved		Thern	noforming Finishing Large Fab Composite		Kec/Sto	re/Packaging Supplier	Other
Root		Desc	ription of work order update	In	itial	Action		Sign &		
Cause 🚈 Dat	e Step C	Qty	or non-conformance	Chi	ef Eng	Description		Date	Verification	QC Inspector
Design , Doc/Data										
Unapproved				FΔII	ΙΤ CΔ	I TEGORY	<u> </u>		<u> </u>	
Landing Gear			General				_		-	~
Bend Centr Crack Crimp Cuffs Crush Heat Inspe	e Not Concentri s ,/Kink/Ripple/W	/ave	Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function		Grain Hardwa Inspect Instruct Misalia Mislabe Misrea Off-set Out of	ion Incomplete/Unqualified tions Incomplete/Unclear gned/off center eled d	Pa Pa Pa Pa	utside Dim ver/Under art Incorre art Lost/M art Moved ositioned \ ower Loss/	tolerance ct issing Wrong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other

DART AEROSPACE LTD	Work Order:	11897+
Description: Plug	Part Number:	D3492-3
Inspection Dwg: D3492 Rev: E		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.750	+/-0.010	.747	1		5108	Vem
Ø0.582	+0.000/-0.002	.747 .5 6 05	/		SLOZ	Ven Mic Ven
0.045	+0.000/-0.002	.044	V		5108	Ven
0.060	+/-0.005	.060	V			
0.060	+/-0.005	.0585				
0.500	+/-0.010	.500			/	
0.090	+0.000/-0.002	.089	V		V	
	,					
 						
	DAS		DAS			

 Measured by:
 9-89
 Audited by:
 9-89
 Preliminary Approval:

 Date:
 14-05-18
 Date:
 14-5-26
 Date:

Rev	Date	Change	Revised by	Approved
Α	06.07.07	New Issue P/O D3492-043	KJ/JLM	
В	06.10.16	Ø0.750 was Ø0.625	KJ/JLM	
С	08.09.04	Tolerance revised for Ø0.750	KJ/DD	
D	11.06.21	Dwg Rev updated	KJ	
E	12.10.26	Tolerance revised for Ø0.582	KJ j/	
F	14.01.21	Dwg Rev updated	KJ 99	14

D3492-XX PLUG (SEE TABLE)--NAS1611 O-RING (SEE TABLE)

D3492-XXX PLUG PARTS LIST

		O I / II CI O LIO I								
	DESCRIPTION	PART NUMBER	QTY -055	QTY -053	QTY -051	QTY -049	QTY -047	QTY -045	QTY 4943	QTY -041
	PLUG ASSEMBLY	D3492-041								Х
	PLUG ASSEMBLY	D3492-043							Х	
	PLUG ASSEMBLY	D3492-045						Х		
	PLUG ASSEMBLY	D3492-047					Х			
	PLUG ASSEMBLY	D3492-049				X				
	PLUG ASSEMBLY	D3492-051			X					
П.	PLUG ASSEMBLY	D3492-053		X						
<u>/£</u>	PLUG ASSEMBLY	D3492-055	х							
	PLUG	D3492-1								1
	PLUG	D3492-3	_ :						1	
	PLUG	D3492-5						1		
	PLUG	D3492-7					1			
	PLUG	D3492-9				1				
	PLUG	D3492-11		i	1				i	
	PLUG	D3492-13		1						
Æ	PLUG	D3492-15	1							
\dashv	O-RING	NAS1611-005						1		
	O-RING	NAS1611-007					1			
\dashv	O-RING	NAS1611-010					_ · -			1
\dashv	O-RING	NAS1611-012		1						
	O-RING	NAS1611-013							1	
	O-RING	NAS1611-015	1		1					
	O-RING	NAS1611-016				1	1			

 $\frac{\text{NOTES:}}{1) \text{ O-RING:}} \text{ POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX}$

SHOP COPY **RETURN TO ENGINEERING UNCONTROLLED COPY** SUBJECT TO AMENDMENT

WORK ORDER MLJ 10. 118977 MLJ 14-05-07

С

E	ADD -05	55 PLUG ASSY	AP	13.08.08		
D	INCORP WAS 0.0	PORATED DEO	AJS	11.05.24		
С		19/-051/-053, CI	PH	07.10.05		
В	ADD -04	7; UPDATE DI	PH	06.05.11		
Α	NEW IS	SUE	PH	06.01.04		
REV.	DESCR	IPTION	BY	DATE		
DESIGN PH			DART AEROSPACE LTD			
DRAWN		AP	HAWKESBURY, ONTARIO, CANADA			
CHECKED A		A55	DRAWING NO.		REV. E	
MFG. APPR.		100	D3492		SHEET 1 OF 2	
APPROVED /		149	TITLE		SCALE	
DE APPR.		-#] PLUG		NTS	
DATE 13.08.08			COPYRIGHT © 2007 BY DA THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS 8 NOT TO BE USED FOR ANY PURPOSE OR COPIED OR CO	UPPLIED ON THE EXPRES	S COMBITTON THAT IT IS	

0.060±0.005 --ØΒ 0.090+0.000 c+0.000 CHAMFER 0.050 X 20° **DETAIL D** -POWDER COAT THESE FACES ONLY PER NOTE 2 - 0.060±0.005 0.500±0.010 - (MASK PRIOR -TO PAINT) **D3492-XX PLUG**

D3492-XX PLUG MACHINING DETAILS

P/N	Α	В	С	MATERIAL SPEC	
D3492-1	0.625	0.394	0.050	M6061T6R0.625	
D3492-3	0.750	0.582	0.045	M6061T6R0.750	
D3492-5	0.375	0.188	0.045	M6061T6R0.375	
D3492-7	0.500	0.270	0.045	M6061T6R0.500	\neg
D3492-9	0.938	0.750	0.045	M6061T6R1.000	╗
D3492-11	0.850	0.664	0.045	M6061T6R0.875	
D3492-13	0.750	0.510	0.045	M6061T6R0.750	
D3492-15	0.850	0.640	0.050	M6061T6R0.875	

D

NOTES:
1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR QQ-A-225/8 (6061) OR QQ-A-200/8 (6061) OR QQ-A-225/1 (1100) (REF. DART MATERIAL SPEC M6061T6R0.000)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED 4) UNITS: INCHES UNLESS OTHERWISE NOTED 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX 6) IDENTIFICATION: N/A 7) WEIGHT: N/A

6

DESIGN	PH	DART AERO	SPACE LTD	
DRAWN	AP	HAWKESBURY, C	NTARIO, CANADA	
CHECKED	155	DRAWING NO.	REV. E	
MFG. APPR.	77	D3492	SHEET 2 OF 2	
APPROVED	10	TITLE	SCALE	
DE APPR.	-#-	PLUG	4:1	
DATE 13.0	80.8	THIS DOCUMENT BY PRIVATE AND CONFIDENTIAL ASSESSMENT OF THE EXPRESS CONCIONS THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR CONFID OR COMMUNICATION DAYS OF MORE PRESIDENT WITHOUT WASTED FOR ANY PURPOSE OR CONFIDENCE ON ANY PURPOSE.		

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